

Notice of Allowability

Application No.

09/435,803

Examiner

Christian La Forgia

Applicant(s)

KIMURA, MISAO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01 March 2005.
2. ☒ The allowed claim(s) is/are 8-10 and 12.
3. ☒ The drawings filed on 01 March 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 3/1/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. The amendment of 01 March 2005 has been noted and made of record.
2. Claims 8-10 and 12 have been presented for examination.
3. Claims 1-7 and 11 have been cancelled without prejudice as per Applicant's request.

Allowable Subject Matter

4. Claims 8-10 and 12 are allowed.
5. The following is an examiner's statement of reasons for allowance:

As per claims 8 and 12, it is well known in the art for a network system providing secure communication services, comprising:

a plurality of pieces of switching equipment, being connected to each other through a public network, and accommodating data terminals (USPN 5,838,792, figures 1, 8, and 9, column 16, lines 17-53); and

central management and control equipment connected to the plurality of pieces of switching equipment (USPN 5,838,792, column 3, lines 56-65),

central management and control equipment connected to the plurality of pieces of switching equipment through a separate network different from the public network (USPN 5,838,792, column 3, lines 56-65),

wherein the central management and control equipment includes a database storing a plurality of sets of a public key and a private key, each assigned to a piece of switching equipment (USPN 5,838,792, column 3, lines 56-65).

It is a well known practice of public key encryption schemes to retrieve a public key of a receiving device from a central authority to establish communications and then continue with the

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communication session using a symmetric session key as evident by at least U.S. Patent No 6,584,563 and Applicant's Admitted Prior Art.

There are no teachings in the prior art of a central management and control equipment connected to the plurality of pieces of switching equipment through a separate network different from the public network;

a first piece of switching equipment, accommodating a data terminal of a calling party, encrypts a dial number of a called party and a user number of the first piece of switching equipment by using a public key, which is used between the first piece of switching equipment and the central management and control equipment and transmits the encrypted dial number and user number to the central management and control equipment via the separate network,

the central management and control equipment decrypts the transmitted dial number and user numbers, retrieves a public key of a second piece of switching equipment accommodating a data terminal of the called party corresponding to the decrypted dial number and a common key, which is used between the first and second pieces of switching equipment, encrypts the retrieved public key of the second piece of switching equipment and the common key, which is used between the first and second pieces of switching equipment by using a public key of the first piece of switching equipment, and second the encrypted public key and common key to the first piece of switching equipment via the separate network. (Emphasis added).

6. Since no teachings or motivation can be found of the abovementioned claim limitations, claims 8-10 and 12 are therefore novel and non-obvious.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. The following patents are cited to further show the state of the art with respect to phone encryption techniques, such as:

United States Patent No. 6,118,993 to Patel, which is cited to show effective use of dialed digits in call origination.

United States Patent No. 5,724,426 to Rosenow et al., which is cited to show controlling access to and interconnection of computer system resources.

United States Patent No. 5,239,294 to Flanders et al., which is cited to show authentication and protection of subscribers in a telecommunications system.

United States Patent No. 5,689,563 to Brown et al., which is cited to show efficient real-time authentication and encryption in a communication system.

United States Patent No. 5,410,602 to Finkelstein et al., which is cited to show key management of point-to-point communications.

United States Patent No. 5,901,284 to Hamdy-Swink, which is cited to show communication access restriction.

United States Patent No. 6,067,546 to Lund, which is cited to show providing computer-network related information about a calling party.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792.

The examiner can normally be reached on Monday thru Thursday 7-5.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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